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Georgia Department of Natural Resources
Environmental Protection Division • Coastal District
400 Commerce Center Drive • Brunswick • Georgia 31523-8251
Phone: 912/264-7284
Mark Williams, Commissioner
F. Allen Barnes, Director

April 14, 2011

Mr. Keith P. Morgan, Executive Director
Brunswick-Glynn County Joint Water and Sewer Commission
700 Gloucester Street, Suite 300
Brunswick, Georgia 31520

RE: ***Comprehensive Evaluation Inspection, Sanitary Sewer Overflow Inspection, and Pre-treatment Compliance Inspection***
Saint Simons Island Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0021521
Glynn County

Dear Mr. Morgan:

On March 29, 2011, the Environmental Protection Division performed these inspections of the St. Simons Island wastewater system to determine compliance with the Georgia Water Quality Control Act, the Rules for Water Quality Control, and the facility's NPDES permit. Mr. Chris Bray, Water and Wastewater Supervisor, Mr. Anthony Crawford, Class I Wastewater Operator, Mr. Todd Zino, Project Manager, and Mr. Gerald Brannon, Area Manager, United Water accompanied me during the inspections.

Each inspection report is enclosed for your review and files.

Overall operations were satisfactory. The physical wastewater plant inspection indicated that one of four blowers was out of service, and a temporary telemetry line to the U/V chambers was on top of the ground. You are encouraged to return the blower to service, and provide more permanent, protected telemetry to the U/V chamber

The efforts in upgrading sewer lift stations, manholes, and collection mains were commendable.

Should you have any questions regarding these inspections, please contact me at 912-264-7284.

Sincerely,

Gary Reynolds
Environmental Specialist III
Coastal District Office

\gr

cc: Mr. Chris Bray, Water and Wastewater Supervisor, United Water
CDS, MWQ Files

Georgia Department of Natural Resources

COASTAL DISTRICT OFFICE

400 Commerce Center Drive, Brunswick, Georgia 31523-8251

Mark Williams, Commissioner

Environmental Protection Division

F. Allen Barnes, Director

912-264-7284

WPCP O&M/COMPLIANCE EVALUATION

Date of Inspection: **March 29, 2011**

Name of Facility: **Saint Simons Island Water Pollution Control Plant**

Address of Facility: **601 Palmetto Street**

City: **St. Simons Island** State: **GA** Zip: **31522** County: **Glynn**

Is copy of current permit at facility? ☒ Yes ☐ No

Permit expiration date: **4/21/10 *(extended 4/19/10)** Permit No: **GA0021521**

Type of Treatment Facility: **Complete mix aeration process** Design Flow (MGD) **4.0**

Responsible Official: **Keith Morgan** Title: **Executive Director, Brunswick-Glynn County Joint Water & Sewer Commission**

Facility Representative: **Anthony Crawford** Title: **Wastewater Superintendent**

Inspected By: **Gary Reynolds** Agency: **EPD, Coastal District**

The Facility meets all requirements of the permit: ☒ Yes ☐ No
(If No, see evaluation rating below for area of deficiency).

All Facility operational and laboratory personnel meet the certification requirements of the State Board of Examiner's Rules of Georgia for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts: ☒ Yes ☐ No

Evaluation Rating of permit Requirements:
(S=Satisfactory) (U=Unsatisfactory) (N/E=Not Evaluated) (M=Marginal)

		Rating
A.	Permit Monitoring and Reporting	**S**
B.	Staffing	**S**
C.	Operation	**S**
D.	Maintenance	**S**
E.	Collection System	**S**
F.	Sludge Disposal	**S**

NUMBERS IN LEFT MARGIN REFER TO CORRESPONDING SECTION IN PERMIT.

A. Permit Sampling, Monitoring and Reporting:

(I.B.)

1. Self-monitoring data reported by the facility for the previous 12 months documents compliance with (if noncompliant, list instances in comments):
   a. Permitted effluent limitations **Yes**
   b. Monitoring Requirements of permit **Yes**
   c. Submission of Reports required by permit **Yes**
   d. Compliance schedules under permit or orders. **Yes**
   e. If noncompliance in a-d, list EPD enforcement status. **N/A**

(I.C.4)

2. Facility personnel record the following for samples collected as required by the permit:
   a. sampling date: Yes ☒ No ☐ d. sample volume: Yes ☒ No ☐
   b. sampling time: Yes ☒ No ☐ e. sampling location: Yes ☒ No ☐
   c. name or initials of person(s) collecting samples Yes ☒ No ☐

(I.B.)

3. Samples are taken at sites specified in permit. Yes ☒ No ☐

(I.C.1.)

4. Locations are adequate for representative samples. Yes ☒ No ☐

(I.B.)

5. Sampling and analysis completed on parameters specified by permit. Yes ☒ No ☐

(I.B.)

6. Sampling and analysis done at the frequency specified by permit. Yes ☒ No ☐

(I.C.3.)

7. Sample collection procedures comply with permit requirements. Yes ☒ No ☐

   a. Samples refrigerated during composting (4°C)? Yes ☒ No ☐
   b. Is temperature logged daily? Yes ☒ No ☐
   c. Proper preservation techniques used? Yes ☒ No ☐
   d. Containers and sample holding times before analyses conform with 40 CFR 136.3. Yes ☒ No ☐

(I.C.3.)

8. Do analytical procedures appear to comply with permit and 40 CFR 136 I.C.6 requirements?

   a. Are calibration records maintained for all lab instruments, including flow meters, used to monitor or analyze permit required parameters: Yes ☒ No ☐ N/A ☐

   b. Are temperature logs maintained for all incubators, ovens, automatic samplers, refrigerators, etc.? Yes ☒ No ☐ N/A ☐

   c. Are the proper temperature ranges maintained for the following:
      1. BOD_5 ($20^\circ C \pm 1^\circ C$) Yes ☒ No ☐ N/A ☐
      2. Fecal Coliform ($44.5 \pm .2^\circ C$) Yes ☒ No ☐ N/A ☐
      3. TSS 103 - $105^\circ C$ Yes ☒ No ☐ N/A ☐
      4. Sample refrigerator (4 - $10^\circ C$) Yes ☒ No ☐ N/A ☐

   d. All chemical and reagents used within expiration dates? Yes ☒ No ☐ N/A ☐

   e. Does pH measurements include sample and buffer temperature? Yes ☒ No ☐ N/A ☐
      Are they recorded? Yes ☒ No ☐ N/A ☐

   f. pH meter calibrated against 2 standard buffers that bracket sample pH. Yes ☒ No ☐ N/A ☐

   g. Is pH meter adjusted to sample/buffer temperature? Yes ☒ No ☐ N/A ☐

   h. In the BOD_5 analyses, are the only results reported based on dilutions within the D.O. depletion criteria ($\geq$2.0 mg/1 D.O. drop and $\geq$1.0 mg/1 D.O. remaining) except where high quality effluent do not produce a $\geq$2.0 mg/2 drop. Yes ☒ No ☐ N/A ☐

   i. At least 2 sample dilutions prepared for BOD_5 analysis. Yes ☒ No ☐ N/A ☐

   j. Are chlorinated samples for BOD_5 dechlorinated and seeded? Yes ☐ No ☐ N/A ☒

   k. In TSS analyses, are residue weights at least 1.0 mg. Yes ☒ No ☐ N/A ☐

   l. At least 3 dilutions prepared for fecal coliform analysis. Yes ☒ No ☐ N/A ☐

   m. Standard curves prepared, used, and updated for parameters where applicable. Yes ☒ No ☐ N/A ☐

9. Are the following quality control measures employed and records maintained?

   a. Duplicate tests performed on approximately 10% of samples. Yes ☒ No ☐ N/A ☐

   b. Reference standards analyzed on a periodical frequency. Yes ☒ No ☐ N/A ☐

   c. Class "S" weights used to check calibration of analytical balance. Yes ☒ No ☐ N/A ☐

d. Value of standardized reagents periodically checked? Yes ☒ No ☐ N/A ☐

e. Air calibration of D.O. meter periodically checked against a Winkler titration? Yes ☒ No ☐ N/A ☐

f. Are sample blanks analyzed where applicable? Yes ☒ No ☐ N/A ☐

COMMENTS: _____

(I.C.4.)

10. Facility personnel record the following laboratory information on the laboratory bench sheet (work sheet, or a reference document.)

a. analyses date Yes ☒ No ☐
b. analyses time Yes ☒ No ☐
c. analytical method Yes ☒ No ☐
d. all calculations and results Yes ☒ No ☐
e. name or initials of analyst Yes ☒ No ☐

(I.C.6.)

11. Monitoring records and original strip chart recording of flow, pH, DO, or other parameters which are continuously monitored are maintained for a minimum of three years except sludge records which are maintained for at least five years. Yes ☒ No ☐

(I.C.5.)

12. Laboratory and DMR data review:

a. Are the DMRs routinely signed by the responsible official? Yes ☒ No ☐

b. Are the "Quantity or Loading" columns on the DMRs filled in with data in kg/day? Yes ☒ No ☐

c. Is fecal coliform bacteria data reported as geometric means? Yes ☒ No ☐

d. Are the "frequency of analysis" and "type sample" columns filled in? Yes ☒ No ☐

e. Are maximum values reported maximum weekly averages for BOD, TSS, and other applicable parameters? Yes ☒ No ☐

f. On the 2.1 or 2.2 form, is data recorded corresponding to the dates the samples were collected instead of the dates the tests were performed? Yes ☒ No ☐

g. Do the 2.1 or 2.2 forms indicate that all tests, including pH, D.O., and TRC tests, are performed at the required frequencies? Yes ☒ No ☐

h. Are all laboratory results relative to permit required parameters included in calculation of DMR reported values. Yes ☒ No ☐

COMMENTS: _____

B. Staffing and Training:

(II.A.5.)

1. Sufficient staff provided to insure all tasks associated with the operation, maintenance, monitoring, and reporting requirements are performed as needed and consistent compliance with permit requirements achieved. Yes ☒ No ☐

(I.C.6.e.)

2. Records maintained on operator certification.
Staffing evaluation form completed. Yes ☒ No ☐

   a. staff name **Anthony Crawford**
   b. certification number **WW1-014639**
   c. license current (expiration date) **6/30/11**
   d. date of certification **?**

(II.A.5.)

3. The person in responsible charge of the operation of the wastewater treatment facility holds a wastewater certificate equal to or higher than the class of the facility, in accordance with the "Rules of Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts." Yes ☒ No ☐

(II.A.5, II.A.6.)

4. Operators and laboratory analysts, other than the person in responsible charge, have obtained minimum certification in accordance with the "Rules of Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts." Yes ☒ No ☐

COMMENTS: **Anthony Crawford, Class I Wastewater Operator, currently is overseeing operations at the St. Simons Island Wastewater Plant as well as Exit 29 WPCP. Other support operators are Ossamane Remtula, Class III wastewater, Fionna, Laboratory Analyst, and Chris Bray, Water and Wastewater Supervisor. Plans are for Chris to test shortly for Class I wastewater operator, and Ozzie to test for Class II wastewater operator. An operator in training is Jon Wagner. Heather Shultz is over the FOG assessment as part of the pretreatment program. Additionally, Seth Box and James Cox are over sewer collection and lift station maintenance.**

C. Plant Operations:

1. Standby power or other equivalent provision provided for critical plant components.
Yes ☒ No ☐ Specify type of standby power system **Diesel generator.**

2. Adequate alarm system for power or equipment failures available. Yes ☒ No ☐
Specify location of system for critical plant components: **all critical WPCP components have a SCADA alarm system.**

3. Sharp increases or decreases in flow, hydraulic and or organic overloads are experienced.
Explain (frequency, magnitude, cause) **Much of the inflow and infiltration has been reduced by a steady implementation of the Master Plan, including replacement of older sewer line at East Beach. Several manholes have been cement refurbished, reducing infiltration through leaking joints. Less than 15% increase at the Plant occurs even during heavy rain events.**

(II.A.7.)

4. The facility bypassed since the last inspection. Yes ☐ No ☒
If yes, describe. _____

5. (Checklist) evaluation of unit processes. Yes ☒ No ☐ N/A ☐

6. Attach schematic of unit processes and flow. Yes ☒ No ☐ N/A ☐

7. The facility has instituted a written or documented process control program, which includes sufficient in-plant testing so that data is representative of actual conditions.
Yes ☒ No ☐ N/A ☐

8. List Process control parameters routinely analyzed:

Parameter	Frequency of Analyses	Range of Results	
a. **pH**	**daily**	**6.5**	**7.5**
b. **ammonia**	**daily**	**0.36**	**0.72**
c. **dissolved oxygen**	**daily**	**7.0**	**8.0**
d. **MLSS**	**3/week**	**1,800**	**2,500**
e. **sludge**	**daily**	**15.7%**	**16.0%**

Are trend charts used? **Yes** For which parameters? **solids settleability, alkalinity**

9. Describe process control strategy employed by use of these analyses. **Sludge wasting rates, oxygen adjustment**

COMMENTS: ____

(I.A.4.f)

D. Plant Maintenance:

1. A written routine preventive maintenance program in place which includes:

   a. lubrication schedules — Yes ☒ No ☐
   b. inspections — Yes ☒ No ☐
   c. replacement of parts — Yes ☒ No ☐
   d. tools or equipment needed — Yes ☒ No ☐

2. Briefly describe how the scheduled maintenance is tracked, and specific tasks are triggered. Is the program computerized? **Plant spare parts and maintenance are computer tracked for maintenance and replacement schedules.**

3. An equipment record and/or maintenance log maintained for each piece of equipment which includes:

   a. record of maintenance performed — Yes ☒ No ☐
   b. persons performing maintenance — Yes ☒ No ☐
   c. date maintenance performed — Yes ☒ No ☐
   d. major repairs and maintenance — Yes ☒ No ☐
   e. associated costs or repairs — Yes ☒ No ☐

4. A spare parts inventory is maintained. Yes ☒ No ☐
5. A spare parts list is kept, and a system is in place to reorder spare parts as they are used. Yes ☒ No ☐

6. The appropriate tools and equipment necessary for performing maintenance tasks are provided. Yes ☒ No ☐

7. Manufacturer's literature for all treatment units is available to plant personnel. Yes ☒ No ☐

COMMENTS: _____

E. Collection System (If system has more than four lift stations, it is recommended that a full, separate technical evaluation of the system be performed).

1. A sewer use ordinance has been enacted by the municipality and enforced to protect the collection system and wastewater treatment facility. Copies of the ordinance should be available at the facility and the City Hall. Describe who is responsible for enforcing the ordinance requirements and how it is done: **The Sewer Use Ordinance is utilized along with the recently Division approved pretreatment ordinance. Heather Shultz implements the FOG provisions as part of the pretreatment program.**

2. Accurate maps and plans of the collection system maintained and updated as new sewer lines and lift stations are added to the system. Yes ☒ No ☐
3. The right-of-way for major interceptor sewer lines maintained and physically inspected once per year as a minimum to identify correctable sources of inflow and breaks in the line. Specify inspection frequency. **Annually as a minimum.**
4. Records of inspection and maintenance of the lift stations maintained and up-to-date. Yes ☒ No ☐
5. A written routine inspection and maintenance program for he collection system has been established. Yes ☒ No ☐
6. A list of spare parts for the lift stations has been developed and an inventory of parts maintained to insure continuous operation and prevent overflows. Yes ☒ No ☐
7. All lift stations are in service and properly operated and maintained. Yes ☒ No ☐
8. The manufacturer's literature on all lift station equipment available to personnel. Yes ☒ No ☐
9. An adequate alarm system and written emergency procedures for prompt response to lift station failures provided. Yes ☒ No ☐
10. Plans and specifications for new sewer lines and lift stations submitted to the Georgia Environmental Protection Division for approval prior to construction or installation. Yes ☒ No ☐

LIFT STATION INVENTORY (add pages if necessary)

Station Name or Location	COMMENTS
#22 (Dunbar Creek)	**Lift station being refurbished with a replacement cylinder station.**
#3 (Oglethorpe)	**Fully renovated. Fenced, visual/audible alarms and Scada, duplex 77 hp VFD, permanent generator.**
#63 (East Beach)	**Fenced (polyvinyl). Dual 10 hp Flyght pumps. SCADA, visual/audible alarms.**
#43 (Epworth)	**Grinder pumps. Checked daily.**

COMMENTS: **A list of 55 lift stations attached.**

F. Sludge Disposal:

(I.A.3.)

1. The facility maintains records to document solids generation and removal. Yes☒No☐N/A☐

(I.A.3.)

2. Sludge disposal procedures have been developed to insure adequate year-round sludge disposal. Yes ☒ No ☐ N/A☐

3. The method for ultimate sludge disposal does not adversely affect the environment such as:

   a. creating offensive odors Yes ☒ No ☐ N/A☐
   b. contaminating surface waters or groundwater Yes ☒ No ☐ N/A☐

c. creating a health hazard Yes ☒ No ☐ N/A☐

4. Describe method of sludge disposal: **Belt press sludge is trucked to Broadhurst MSWL, Wayne County.**

(I.A.2.)

5. If land application is utilized for sludge disposal, a sludge management plan has been developed as required by the permit (If yes, include year EPD approved the plan or most recent amendment). Yes ☐ No ☐ N/A ☒ ____

(I.A.3.)

6. The quantity of solids removed from the plant is equal to the solids generated on an average daily basis: Check if N/A☐

a. Plant Data (average for **January 1** to **January 31, 2011**)

Flow (Q) **1.971** (MGD)
Influent BOD_5 (IB) **169** (mg/1)
Effluent BOD_5 (OB) **2.1** (mg/1)
Effluent TSS (ES) **2** (mg/1)
Y.C. (YIELD COEFFICIENT) *
Process (include primary clarifier if necessary)

Y.C. = 1.3 ____

*(multiply together as many as apply)

b. 1. Expected sludge production = (Q) (IB-OB) (YC) (8.34) = **3,566.58** lb/day

2. Accounted for sludge:

a. Intentionally wasted sludge **8,741.93** lb/day
(from facility sludge records)

b. Effluent solids: (Q x ES x 8.34) **32.88** lb/day

3. Unaccounted for sludge: **-5,175.35** lb/day
(1.) – (2a + 2b)

Refer to pp. 35 and 43 of EPA Handbook for Improving POTW Performance Using the Composite Correction Program Approach, pp. 32, 35, or plant data if available.

COMMENTS: **The Joint Water and Sewer Commission contracted operators plan to generate the calculation for future reports. Utilizing data from January 1-31, 2011 yielded a negative evaluation.**

FACILITY RECONNAISSANCE

Name of Facility: **Saint Simons Island WPCP** Date: **March 29, 2011**

Permit No: **GA0021521** Responsible Official: **Anthony Crawford**

Permitted Flow: **4.0 MGD** Inspected By:**Gary Reynolds**

GENERAL CONDITIONS:

	YES	NO	N/A
Excessive scum, grease, foam or floating sludge in clarifiers.	☐	☒	☐
Noxious odors (give location)	☐	☒	☐
Severe corrosion of structures/equipment-Grit chamber	☐	☒	☐
Chemical, wastewater or sludge spills	☐	☒	☐
Vital equipment out of service **Blower No. 4 out of service.**	☒	☐	☐
Excessive noise (give location)	☐	☒	☐
Unusual or improvised equipment **A surface wire providing U/V telemetry will be permanently installed.**	☒	☐	☐
Overflowing of influent lines, overflow weirs or other structures	☐	☒	☐
Overflows at alternate discharge points, bypass, or any unpermitted discharges (give location):	☐	☒	☐
Pipes from process/storage areas that exhibit evidence of discharge to the ground or to surface water.	☐	☒	☐

PRELIMINARY TREATMENT:

Odors in preliminary treatment area	☐	☒	☐
Excessive debris on bar screen	☐	☒	☐
Grit chamber clogged	☐	☒	☐
Grit and screenings improperly contained	☐	☒	☐

	YES	NO	N/A
ACTIVATED SLUDGE TANKS:			
Dead spots, dark foam or bad order	☐	☒	☐
Surface aerator or compressor failure	☐	☒	☐
Blower/aerator on timer **Interval.**	☐	☒	☐
Air rising in clumps (boiling)	☐	☒	☐
Leaks in compressed air piping	☐	☒	☐
Dark mixed liquor or dark tan foam	☐	☒	☐
Thick billows of white, sudsy foam	☐	☒	☐
Low dissolved Oxygen (<1 mg/L) Actual D.O. **2.97**	☐	☒	☐
MLSS concentration **2,000** Excessive or low	☐	☒	☐
SECONDARY CLARIFIER:			
Excessive gas bubbles on surface	☐	☒	☐
Both clarifiers were in use. Overflow weirs fouled or not level	☐	☒	☐
Short circuiting of flow	☐	☒	☐
Buildup of solids in center well of Circular clarifier	☐	☒	☐
Pin floc in overflow	☐	☒	☐
Scum rake ineffective or overloaded	☐	☒	☐
Sludge floating on surface, clumping	☐	☒	☐
Billowing sludge or sludge blanket too high. Depth **8-10"**	☐	☒	☐
Sludge withdrawal ports clogged	☐	☒	☐
Evidence of solids washout	☐	☒	☐
Sludge judge not available	☐	☒	☐

	YES	NO	N/A
CHLORINATION: (U/V system only)			
Excessive gas bubbles on surface	☐	☐	☒
Sludge buildup in contact chamber	☐	☐	☒
Short circuiting of flow	☐	☐	☒
Inadequate detention time	☐	☐	☒
Foaming at outfall or downstream	☐	☐	☒
Floating scum and/or solids in chamber	☐	☐	☒
Chlorine feed rate _____ Flow proportioned? _____	☐	☐	☒
Chlorine tank empty or nearly so	☐	☐	☒
Feed equipment non-operational	☐	☐	☒
GENERAL SLUDGE HANDLING:			
Inadequate sludge removal from clarifiers or thickeners	☐	☒	☐
Belt-pressed sludge hoppered to Broadhurst MSWL, Wayne County			
Thickened sludge too thin	☐	☒	☐
Gravity thickener weirs fouled	☐	☐	☒
Sludge pumps out of service	☐	☒	☐
ANAEROBIC DIGESTER:			
Mixers or heater not operating	☐	☐	☒
Floating cover tilting	☐	☐	☒
Gas burner not burning or inoperative	☐	☐	☒
Supernatant exuding sour odor	☐	☐	☒
AEROBIC DIGESTER:			
Excessive foaming or bad odor	☐	☒	☐
Clogging of diffusers	☐	☒	☐

	YES	NO	N/A
Mechanical aerator failure	☐	☒	☐
Insufficient D.O. in digester. Actual D.O. ?	☐	☒	☐
FILTRATION (Sand filters, ect.): (fabric filter for media prior to U/V system)			
Filter surface clogged; ponding	☐	☒	☐
Gravel displacement of filter media	☐	☐	☒
Formation of mud balls in filter media	☐	☒	☐
Loss of filter media during backwashing	☐	☒	☐
Trash or vegetation on media surface	☐	☒	☐
SLUDGE DEWATERING (belt press sludge in container hauled to Broadhurst MSWL, WayneCounty)			
How many drying beds? 4			
Poor sludge distribution on drying beds	☐	☒	☐
Sludge applied to already full bed	☐	☒	☐
Vegetation in drying beds	☐	☒	☐
Dry sludge remaining in drying beds	☐	☒	☐
Sludge runoff from plant site	☐	☒	☐
Mechanical dewatering system failure	☐	☒	☐
Spilled sludge around dewatering units	☐	☒	☐
Sludge stockpiled on plant grounds	☐	☒	☐
FLOW MEASUREMENT:			
(Type of Primary device **Inf: 18" parshall flume/ Eff: 12" parshall flume**)			
Broken, cracked, clogged primary device	☐	☒	☐
Stilling well clogged or broken	☐	☐	☒
Weir crest corroded, damaged, not level or not sharp-edged (<1/8")	☐	☐	☒

	YES	NO	N/A
Sizing of system not appropriate for flow range	☐	☒	☐
Influent flow not measured before all return lines	☐	☒	☐
Effluent flow not measured after all return lines	☐	☒	☐
Flow meter accurate to within 10% of primary device:	☒	☐	☐

Meter reading **2.6 MGD**

Primary device head: **11.75"** flow: **2.47 MGD (effluent 12" parshall flume)**

PLANT EFFLUENT:

Outfall inaccessible:	☐	☒	☐
Excessive solids, turbidity, foam, grease, scum, color or macroscopic particulate matter	☐	☒	☐

YSI meter read effluent D.O. mg/l of 7.95 by Class III WQ operator, Ozzie

CHEMICAL TREATMENT EQUIPMENT:

Heavy corrosion evident	☐	☒	☐
Chemicals left in open atmosphere	☐	☒	☐
Chemical containers stored improperly or hazardously	☐	☒	☐
Dry chemicals spilled between storage area and feed units	☐	☒	☐
Empty chemical containers improperly disposed of	☐	☒	☐
Liquid chemical feed units not appropriately contained (berms/dikes)	☐	☒	☐
Chemical dust covering feed unit area, storage or transfer areas	☐	☒	☐
Ruptures in chemical feed line	☐	☒	☐

PONDS (Stabilization, Polishing, Equalization, etc.):

Erosion of bank or dike; animal burrows	☐	☒	☐
Weeds in pond or along dike at water line	☒	☐	☐
Foaming and/or spray in aerated lagoon	☐	☐	☒
Dead fish or other organisms	☐	☒	☐
Scum or debris accumulation along dike	☒	☐	☐

	YES	NO	N/A
Odor, foam, floating solids or oil sheen	☒	☐	☐
Bypass of one or more pond cells	☐	☐	☒
Effluent structure improperly maintained	☐	☐	☒
Excessive sludge buildup	☐	☐	☒
Excessive algae or duckweed	☒	☐	☐
Other problems	☐	☒	☐

The emergency overflow pond is not maintained as a discharge holding pond. It acts as an emergency spill storage only.

RECEIVING STREAM:

Downstream appearance significantly altered by effluent (color, turbidity, etc.) describe:	☐	☒	☐
Sludge accumulation in streambed or along bank	☐	☒	☐
Drop in D.O. downstream, below stream standard **N/E (Not evaluated)**	☐	☒	☐
Noxious odors downstream of outfall	☐	☒	☐
Evidence of toxicity (dead fish even though apparently adequate D.O., dead or impaired plants, etc.)	☐	☒	☐

SAFETY:

The following safety equipment is available:

a.	Fire extinguishers	☒	☐	☐
b.	First-aid kits	☒	☐	☐
c.	Self-contained breathing units or canister masks	☐	☐	☒
d.	Chlorine repair kit	☐	☐	☒
e.	Chlorine gas detectors	☐	☐	☒
f.	Safety signs, painted highlights, other warnings	☒	☐	☐

	YES	NO	N/A
PLANT GROUNDS:			
The grounds are poorly kept, i.e. grass needs cutting	☐	☒	☐
Buildings, equipment, etc. need painting	☐	☒	☐
The all weather roads are potholed or otherwise in disrepair	☐	☒	☐

COMMENTS: **A walk-through inspection with United Water representatives revealed optimal operation of the Wastewater Pollution Control Plant. A couple of equipment issues were being addressed, such as replacement of blower No. 4 (of 4), and a telemetry issue with the U/V system. Both aeration basins were functioning, with all diffusers entact. The two clarifiers were producing acceptable effluent, and no grease or scum issues were observed on the clarifier surfaces. Dunbar Creek receiving stream appeared free of foam or solids issues.**

CONTACT, PERMIT, AND SYSTEM CHARACTERIZATION INFORMATION

CONTACT INFORMATION

SSI WWTP	601 Pametto Dr.	GA 00 21512
FACILITY NAME	FACILITY ADDRESS	NPDES PERMIT NO.
Chris Bray		
CONTACT NAME	CONTACT TITLE	DATE OF ISSUANCE
912-261-7160	912-638-2290	4/10
PHONE NUMBER	FAX NUMBER	DATE OF EXPIRATION

PERMIT INFORMATION

	YES	NO	N/A	Source*
What facilities does the permit cover? WWTP and wastewater collection system	✓			
Does the permit authorize wet weather bypasses?		X		
What is the maximum permitted flow rate for the treatment plant?				____ MGD
Is the facility under any administrative or judicial order?		X		

SYSTEM CHARACTERIZATION

Are partially treated effluents combined with fully treated flows prior to discharge? (Blend)				
Length of pipeline in the collection system (all non-lateral lines):				± 90 miles
Number of pump stations in the system:				55
Number of constructed overflows prior to the WWTP:				Unknown
Are portions of the interceptors or other lines known or believed to be hydraulically overloaded or undersized?		X		
Are there locations known to experience basement flooding or other similar problems?		X		
What information is available on maps kept on-site by the permittee:				
all major interceptors and trunk sewers with pipe size and direction of flow	X			
laterals		X		
pump stations	X			
diversion chambers			X	
flow meters	X			
rain gauge stations				
control structures (regulators, diversion structures, weirs, valves)			X	
water quality monitoring sites				
receiving streams	X			
locations of telemetering devices	X			
treatment plant location	X			

How many municipalities discharge to the collection system? None

What treatment capacity is available at the WWTP?

design primary treatment capacity	____ MGD
design secondary treatment capacity	____ MGD
peak flow primary treatment capacity	____ MGD
peak flow secondary treatment capacity	____ MGD

Which parts of the collection system are owned by the permittee?

all	X			
pump stations	X			
diversion chambers			X	
sewer pipes (other than private laterals)	X			

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

	YES	NO	N/A	Source*
Which parts of the collection system are operated by the permittee?				
all	X			
pump stations	X			
diversion chambers			X	
sewer pipes (other than private laterals)	X			
Does the permittee have legal agreements with other parties that required those parties to perform tasks required by the NPDES permit?		X		2

I. PROPER OPERATION AND MAINTENANCE

A. General

Does the permittee have an O&M plan for the wastewater collection system?		X		(In Development)
If so, is that plan approved or required by the permitting authority?		X		
Does the permittee have a copy of the documentation required under the O&M plan?		X		(In Devel.)
Does the permittee have a process for periodically revising the O&M plan?		X		(In Devel.)
Does the O&M plan specify that some activities be performed by a separate legal entity?	X			(United Water)
If so, does the permittee have documentation that those activities are being performed?	X			

B. Inspections

Does the permittee inspect known SSO locations?	X			
How frequently are the known SSOs inspected? (e.g., each rain event, complaint, rain over .5 inch)	Complaint / Lift Station prob.			
How frequently are pump stations inspected?	Daily / weekly			
Does the permittee have documentation of SSO inspections?	X			
Does the permittee have documentation of the pump station inspections?	X			
Does the permittee have records of collapsed and/or blocked sewers?	X			
Does the permittee conduct CCTV inspections of the collection System?				
If so, how many miles of sewer lines are inspected with CCTV annually?	3.78 Miles			
How many equivalent full time staff are dedicated to inspections?	2 (?)			

If not, how are collection system equipment malfunctions or other deficiencies identified?
DAILY SURVEILLANCE BY STAFF, COMPLAINT REPORTS, MAINTENANCE LOGS.

Will the CCTV inspections eventually reach all major (i.e. non-lateral) lines in the system?	X			

C. Cleaning and Maintenance

Does the permittee have a schedule for cleaning the sewer lines?	X			

How are cleaning frequencies for the sewer lines determined?
Prioritized by system age and condition and thereafter on a schedule of years between cleanings based on condition

Does the permittee have procedures for reducing solids deposition in the system?	X			
Does the permittee document sewer cleaning that has been performed?	X			
If so, does the documentation in any way differ from the permittee's schedule for cleaning?	X			(Emergency Calls)
Does the permittee exercise regulators according to a schedule?			X	
Are any regulators not functioning (e.g. rusted in place)?			X	

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

	YES	NO	N/A	Source*
Is a computerized maintenance program used to track work orders? If so, is it used for:				
the WWTP?	X			
the pump stations	X			
the collection system, apart from the pump stations?	X			
Does the permittee have the following records?	X			
cleaning logs				
citizen complaints	X			
work orders	X			
video tape of CCTV inspections	X			
maps of problem areas	X			
emergency response plan	X			
training manuals	X			
Does the permittee have a grease control program?	X			
Does the permittee have a root control program?	X			
Do the maintenance records indicate recurring problems which the program does not seem to be effective in reducing?		X		
		X		

What is the procedure for documenting and correcting collection system deficiencies?
W/O program / CMMS / Field observation

How many complaints (re: basement backups, other discharges)) are received annually? 35

How are complaints addressed?
Initial response to determine if problem is a public or private issue; Issue of workorder for public problem correction as appropriate — Assistance to private problems per JWSC SOP

If so, describe: N/A

How many full time equivalent staff are dedicated to sewer cleaning and maintenance? 8

What spare parts for pump stations are kept in the inventory?
LIFT STATION MOTORS, BEARINGS, OTHER COMPONENTS.

D. Operation of the Collection System

How many pump stations have a backup power supply? How many of these have:	
dual feed?	N/A
on-site generator?	1
off-site portable generator	2
How many pump stations have backup pumping capacity if the largest pump goes down?	all
How many times has a pump failure (or inadequate pumping capacity) resulted in a SSO?	0

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

	YES	NO	N/A	Source*
How many pump stations have permanent flow meters?		1		
How many pump stations are monitored remotely?		55		
What is the annual operating budget for the collection system?		$ 300,000		
How many miles are operated within the budget?		± 90 miles		

What type of training does the permittee provide to collection system personnel?
State licensing training for CTD license / In-house training on UW SOP's / weekly, monthly, annual safety & Environmental training

Does the permittee have procedures for regulating diversion and bypass valves?			X	

If so, describe; N/A

What flow rate can the WWTP receive before additional flow adversely affects the WWTP treatment process: UNKNOWN MGD

Does the permittee do a pre-storm drawdown of the WWTP wet well and interceptors to add additional wet weather capacity?		X		
Which, if any, of the following does the permittee use for storage of untreated sewage?				
abandoned pipelines		X		
catch basin storage tanks		X		
earthen basins	X			
first flush tanks		X		
in-receiving water flow balance		X		
in-sewer storage (e.g. raising weirs, regulator adjustment)		X		
lagoons	X			
open concrete retention tanks		X		
closed concrete retention tanks		X		
storage tunnels and conduits		X		
Which, if any, of the following does the permittee use to reduce storm water inflow:				
area drain, foundation drains, and roof leader disconnection		X		
basement sump pump redirection		X		
flow restrictions and catch basin inlet modification		X		
grassed swales and infiltration trenches		X		
infiltration basins		X		
on-street surface storage		X		
porous pavements		X		
storm water detention basins	X			
storm water infiltration sumps		X		
Does the permittee have programs for reducing I/I ?	X			(Master plan)
Does the permittee have a pretreatment program?	X			
What percentage of flow to the POTW is non-domestic?				____ %
Has the permittee identified industrial users whose discharge could reach SSOs?	X			
If so, does the permittee have documentation of this evaluation?	X			

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

	YES	NO	N/A	Source*
Has the permittee modified its pretreatment program to reduce IU discharge to SSOs?	X			
If so, do the modifications				
prohibit batch discharges during wet weather?	X			
require detention of industrial discharge during wet weather?	X			
other:				
Does the permittee have a process for periodic review of the pretreatment program?	X			
Is the maximum wet-weather WWTP capacity reached during wet weather events?		X		
If a bypass is used, does the permittee monitor bypass flow rates?			X	
Are other treatment units available for use during a storm event?		X		
Has the permittee determined the hydraulic capacity of each pump station?		X		(Partially Cap)
Has the permittee determined the hydraulic capacity of each influent sewer?		X		
Is pump station capacity smaller than interceptor capacity in any portions of the system?		X		

What other bottlenecks, if any, has the permittee identified in the collection system?
A major collection system upgrade occurred at East Beach, St. Simons Island, correcting much I/I issues.

Has the permittee upgraded any pump stations to increase capacity? X

Has the permittee identified any process limitations at the WWTP? If so, what are they? N/A

How does the permittee become aware of SSOs?
Customer complaints or Field observations

What are the most common causes of SSOs?
Grease build up in residential areas

What steps has the permittee taken to prevent SSOs at problem locations?
PM procedures, Not allowing system surcharging

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

	YES	NO	N/A	Source*
Does the permittee document SSOs? Does the documentation include:	X			
date and time of overflow	X			
volume of overflow	X			
SSO Location	X			
cause of overflow	X			
corrective action taken	X			
Ultimate destination of overflow	X			
Does the permittee's documentation reports SSOs to the permitting authority?	X			
Which, if any, of the following methods does the permittee use to monitor the frequency and duration of SSO discharges?				
installed sensors and telemetry		X		
visual survey during scheduled inspections	X			
visual survey during wet weather	X			
citizen complaints	X			
Which, if any, of the following methods does the permittee use to measure the impacts of SSOs on receiving streams?				
visual survey of receiving stream when SSOs are active	X			
biosurveys				
water quality sampling:	X			
BOD/CBOD	X			
total suspended solids	X			
dissolved oxygen	X			
fecal coliform	X			
E. coli				
enterrococci				

ATTACHMENTS

List of pump stations? ✓			
List of SSOs? N/A			

(4) PHOTOS

Inspector: GARY REYNOLDS, EPD, CD SOUTH

Inspection Date: MARCH 29, 2011

FOUR LIFT STATIONS WERE INSPECTED (NO. 22 - DUNBAR CREEK; NO. 3 - OGLETHORPE; NO. 63 - EAST BRAIN; AND NO. 43 - EPWORTH). A MAJOR UPGRADE AT NO. 22 WAS ON-GOING, REPLACING TH STATION WITH A SCCT 0 CYLINDER. EACH STATION HAD AUDIBLE/VISUAL ALARMS, AND SCADA FUNCTIONED EXCEPT EPWORTH, WHICH WAS A GRINDER STATION.

THE JOINT WATER SEWER COMMISSION'S CONTRACTOR, UNITED WATER, HAD EXTENSIVE GIS MAPPING FOR ITS 3,000 MANHOLES, 55 LIFT STATIONS. APPROXIMATELY 90 MANHOLES HAVE BEEN CEMENT REFURBISHED, WITH 20/YEAR ANTICIPATED. I/I HAS BEEN REDUCED TO < 15% INCREASE OF RAINWATER TO THE WPCP DURING WET WEATHER EVENTS.

A COMPUTERIZED COMPLAINT RESOLUTION WORK ORDER/RESPONSE SYSTEM IS IMPLEMENTED.

AN AERIAL CROSSOVER AT DUNBAR CREEK WAS OBSERVED AS ADEQUATELY PROTECTED BY IDENTIFICATION AND SITE MONITORING AS IT WAS LOCATED BY LIFT STATION NO. 22.

* (P) Permit; (A) Application for permit; (R) Reports submitted; (I) Interview of facility representative; (D) Direct observation; (O) Other

NO SEV CODE VIOLATIONS EXISTED.

G Reynolds EPD CD South

PCI CHECKLIST CONTENTS

COVER PAGE

X	Section I	IU File Evaluation
__	Section II	Supplemental Data Review/Interview
X	Section III	Evaluation and Summary
__	Attachment A	Pretreatment Program Status Update
__	Attachment B	Pretreatment Program Profile
__	Attachment C	Worksheets
		__ WENDB Data Entry Worksheet
		__ RNC Worksheet
		__ IU Site Visit Report Form (Optional)
		__ File Review Worksheets (Optional)
	Attachment D	Supporting Documentation

CA name and Address:
St. Simons Island WPCP
161 S. Harrington Road
St. Simons Island, GA. 31522

Date(s) of PCI: **March 29, 2011**

Period Covered by PCI: **March 1, 2010-February 28, 2011**

PIRT/DSS incorporated in NPDES permit? **Yes**

INSPECTOR(S)

NAME	TITLE/AFFILIATION	PHONE NUMBER
Gary Reynolds	**Environmental Specialist III**	**(912) 264-7284**

CA REPRESENTATIVES(S)

NAME	TITLE/AFFILIATION	PHONE NUMBER
Chris Bray	**Operations Manager**	**(912) 261-7160**
Anthony Crawford	**Wastewater Superintendent**	**(912) 261-7160**

ACRONYM LIST

ACRONYM	TERM
BMR	BASELINE MONITORING REPORT
CA	CONTROL AUTHORITY
CFR	CODE OF FEDERAL REGULATIONS
CIU	CATEGORICAL INDUSTRIAL USER
CSO	COMBINED SEWER OVERFLOW
CWA	CLEAN WATER ACT
SWF	COMBINED WASTESTREAM FORMULA
DSS	DOMESTIC SEWAGE STUDY
EP	EXTRACTION PROCEDURE
EPA	US ENVIRONMENTAL PROTECTION AGENCY
ERP	ENFORCEMENT RESPONSE PLAN
FTE	FULL-TIME EQUIVALENT
FWA	FLOW-WEIGHTED AVERAGE
GPD	GALLONS PER DAY
IU	INDUSTRIAL USER
IWS	INDUSTRIAL WASTE SURVEY
MGD	MILLION GALLONS PER DAY
MSW	MUNICIPAL SOLID WASTE
N/A	NOT APPLICABLE
N/D	NOT DETERMINED
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
O&G	OIL AND GREASE
PIRT	PRETREATMENT IMPLEMENTATION REVIEW TASK FORCE
POTW	PUBLIC OWNED TREATMENT WORKS
RCRA	RESOURCE CONSERVATION AND RECOVERY ACT
RNC	REPORTABLE NONCOMPLIANCE
SIU	SIGNIFICANT INDUSTRIAL USER
SNC	SIGNIFICANT NONCOMPLIANCE
TCLP	TOXICITY CHARACTERISTIC LEACHATE PROCEDURE
TRC	TECHNICAL REVIEW CRITERIA
TTO	TOTAL TOXIC ORGANICS
WENDB	WATER ENFORCEMENT NATIONAL DATA BASE

No Industries requiring an Industrial Permit exist on St. Simons Island; therefore, no Industrial User Permits have been issued. The Brunswick-Glynn County Joint Water & Sewer Commission's contracted operator, United Water, have staff which inspect and track for FOG compliance, assuring grease traps are installed and serviced for small commercial operators.

INSTRUCTIONS: Select a representative number of files to review. Provide relevant details on each file reviewed. Comment on problems identified. Where possible, all CIUs (and SIUs) added since the last PCI or audit should be evaluated. Make copies of this section to review additional files as necessary.

NARRATIVE COMMENTS

FILE__Industry name and address:

Total flow (gpd):

Process flow (gpd):

Compliance Status:

__ SNC (period:

__ Noncompliance/corrected

__ Noncompliance/continuing

Type of products manufactured:

Industry visited during PCI? ____ Yes ____ No

Applicable Federal Category:

SIC:

COMMENTS

Industrial Permit No.: . Exp:

File review:

NARRATIVE COMMENTS (Continued)

FILE__Industry name and address:

Total flow (MGD): Process flow (MGD):
Contact:

Compliance Status:
___ SNC
__ Noncompliance/corrected
__ Noncompliance/continuing

Type of products manufactured:
Industry visited during PCI? _____Yes_____ No
Applicable Federal Category:
SIC:

COMMENTS

Industrial Permit No.: Exp: .

FILE____Industry name and address:

Total flow (gpd): Process flow (gpd):
Contact:

Compliance Status: ___ Type of products manufactured: _____
__ SNC (period:
__ Noncompliance/corrected
___ Noncompliance/continuing

Industry visited during PCI? _____ Yes _____ No
Applicable Federal Category:
SIC:

COMMENTS

CA conducted an industrial inspection on
Industrial Permit No.: _____Exp: _____

NARRATIVE COMMENTS (Continued)

FILE__Industry name and address: Total flow (gpd): _____ Process flow (gpd): ____
Contact:

Compliance Status: ___
__ SNC (period:
__ Noncompliance/corrected
__ Noncompliance/continuing

Type of products manufactured: _____
Industry visited during PCI? ____ Yes ____ No
Applicable Federal Category:
SIC:

COMMENTS

File review ( )indicates compliance.

CA conducted an industrial inspection on _____.
Industrial Permit No.: _____ Exp: _____

FILE_____Industry name and address: Total flow (gpd):
Contact:
Process flow (gpd): _____

Compliance Status:
__ SNC (period:
__ Noncompliance/corrected
__ Noncompliance/continuing

Type of products manufactured: _____
Industry visited during PCI? _____ Yes ____ No
Applicable Federal Category:
SIC Code(s):

COMMENTS

Industrial Permit No.: Exp:

INSTRUCTIONS: Evaluate the contents of SIU files. Indicate problem areas with an (X). Use NA (not applicable) where necessary. Use ND (not determined) where there is insufficient information to evaluate/determine implementation status. Use Y (yes) if condition is met and N (no) if condition is failed. Use NE (not evaluated) where appropriate. Leave the space blank when a problem is not noted. Comment on each problem identified. Clearly identify the file that each comment pertains to; also indicate where a comment applies to all the files.

INDUSTRY NAME

1.
2.
3.
4.
5.

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6
A. CA NOTIFICATION OF IU						
1. Notification of classification (403.8(f)(2)(iii)						
2. Notification of applicable standards/requirement/ RCRA (4038(f)(2)(iii)						

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6
B. ISSUANCE OF IU CONTROL MECHANISM						
1. Issuance or reissuance of control mechanism 403.8(f)(1)(iii)						
2. Control mechanism contents(403.8(f)(1)(iii)						
a. State of duration ($\leq$ 5 years)						
b. Statement of nontransferability						
c. Applicable effluent limits (local limits, categorical standards)						
d. Self monitoring requirements						
* Identification of pollutants to be monitored						
* Sampling frequency						
* Sampling Locations/discharge point						
* Sample types (grab or composite)						
* Reporting requirements						
* Record-keeping requirements						

e. Statement of applicable civil and criminal penalties ___ ___ ___ ___ ___ ___

f. Compliance schedules ___ ___ ___ ___ ___ ___

g. Notice of slug loading ___ ___ ___ ___ ___ ___

h. Notification of spills, bypasses, upsets, etc. ___ ___ ___ ___ ___ ___

i. Notification of significant change in discharge ___ ___ ___ ___ ___ ___

j. 24-hour notification of violation/resample requirement ___ ___ ___ ___ ___ ___

k. Slug discharge control plan requirement ___ ___ ___ ___ ___ ___

COMMENTS:

C. CA APPLICATION OF IU PRETREATMENT STANDARDS

1. IU Categorization **403.8(f)(1)(ii)** ___ ___ ___ ___ ___ ___

2. Calculation and application of categorical standards **403.8(f)(ii)**

   a. Classification by category/subcategory ___ ___ ___ ___ ___ ___
   b. Classification as new/existing source ___ ___ ___ ___ ___ ___
   c. Application of limits for all regulated pollutants ___ ___ ___ ___ ___ ___

3. Application of local limits **403.5(c)&403.8(f)(1)(ii)** ___ ___ ___ ___ ___ ___

4. Calculation and application of production-based standards **403.6(c)** ___ ___ ___ ___ ___ ___

5. Calculation and application of CWF or FWA **403.6(d)&(e)** ___ ___ ___ ___ ___ ___

6. Application of most stringent limit **403.8(f)(1)(ii)** ___ ___ ___ ___ ___ ___

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6

D. CA COMPLIANCE MONITORING

Sampling

1. Sampling (once a year) **403.8(f)(2)(v)** ___ ___ ___ ___ ___ ___

2. Sampling at frequency specified in approved program ___ ___ ___ ___ ___ ___

3. Documentation of sampling activities **403.8(f)(2)(vi)** ___ ___ ___ ___ ___ ___

4. Analysis of results for all parameters ___ ___ ___ ___ ___ ___

5. Appropriate analytical methods (40 CFR Part 136)

403.8(f)(2)(vi)

Inspection

6.Inspection (once a year) **403.8(f)(2)(v)**

7.Inspection at frequency specified in approved program

8.Documentation of inspection activities **403.8(f)(2)(vi)**

9.Evaluation of need for slug discharge control plan **403.8(f)(2)(v)**

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	File #6
E. CA ENFORCEMENT ACTIVITIES						
1. Identification of violation **403.8(f)(2)(vi)**						
a. Discharge violations						
b. Monitoring/reporting violations						
c. Compliance schedule violations						
2. Calculations of SNC **403.8(f)(2)(vii)**						
3. Adherence to approved ERP **403.8(f)(5)**						
4. Escalation of enforcement **403.8(f)(2)(5)**						
5. Publication for SNC **403.8(f)(2)(vii)**						

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6
F. IU COMPLIANCE STATUS						
Self-Monitoring and Reporting						
1. Sampling at frequency specified in control mechanism/regulation **403.12(e)&(h)**						
2. Analysis of all required pollutants **403.12(g)(1)&(h)**						
3. Submission of BMR/90-day report **403.12(b)&(d)**						
4. Periodic self-monitoring reports **403.12(e)&(h)**						

5. Reporting all required pollutants **403.12(g)(1)&(h)** ___ ___ ___ ___ ___ ___

6. Signatory/certification of reports **403.12(i)** ___ ___ ___ ___ ___ ___

7. Submission of compliance schedule reports by required dates **403.12(c)** ___ ___ ___ ___ ___ ___

8. Notification within 24 hours of becoming aware of violations **403.12(g)(2)**
   * Discharge violations ___ ___ ___ ___ ___ ___
   * Slug load ___ ___ ___ ___ ___ ___
   * Accidental spill ___ ___ ___ ___ ___ ___

9. Resampling/reporting within 30 days of knowledge of violation **403.12(g)(2)** ___ ___ ___ ___ ___ ___

10. Notification of hazardous waste discharge **403.12(j)&(p)** ___ ___ ___ ___ ___ ___

11. Submission/implementation of slug discharge control plan **403.8(f)(2)(v)** ___ ___ ___ ___ ___ ___

12. Notification of significant changes **403.12(j)** ___ ___ ___ ___ ___ ___

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6
13. Noncompliance with discharge limits (but not SNC)		___	___	___	___	___ ___
14. SNC **403.8(f)(2)(vii)**						
a. Chronic violations		___	___	___	___	___ ___
b. TRC			___	___	___	___ ___ ___
c. Pass through or interference **[403.5(a)(1)]**						
* Spill or slug load **[403.12(f)]**	___	___	___	___	___	___
d. Other discharge violations (specify)		___	___	___	___	___ ___

Reporting

15. Noncompliance with reporting requirements (but not SNC) **403.8(f)(2)(vii)** ___ ___ ___ ___ ___ ___

16. SNC with reporting requirements **403.8(f)(2)(vii)** ___ ___ ___ ___ ___ ___

COMMENTS:

	FILE #1	FILE #2	FILE #3	FILE #4	FILE #5	FILE #6

G. OTHER

COMMENTS:

SECTION I COMPLETED BY: **DATE:**
TITLE: **PHONE:**

INSTRUCTIONS: Complete this section during the onsite visit based on CA activities since the last PCI or audit. Attach documentation where appropriate. Specific data may be required in some cases.

	YES	NO
A. CA PRETREATMENT PROGRAM MODIFICATION (403.18)		
1. Did the CA make substantial changes to the pretreatment program that were not approved by the Approval Authority (e.g., definitions, limits)?		X
If yes, describe.		
2. Is the CA in the process of modifying any approved pretreatment program component (including legal authority, local limits, DSS requirements, etc.)?		X
If yes, describe.		

B. IU CHARACTERIZATION [403.8(F)(2)(I)&(III)]

1. How and when does the CA update its IWS to identify new IUs or changes in wastewater discharges at existing IUs? **403.8(f)(2)(i) Any proposed customer, prior to servicing, is reviewed through a pretreatment coordinator (Ms. Debbie Pace) to assure no Sewer Use Ordinance/pretreatment ordinance issues exist.**

2. How many IUs are currently identified by the CA in each of the following groups?

   a. SIUs (as defined by the CA) [WENDB-SIUS] 0
   b. Other regulated noncategorical IUs (specify) 0

   c.

C. CONTROL MECHANISM EVALUATION [403.8(f)(1)(iii)]

1. a. How many SIUS (as defined by the CA) are required to be covered by an individual control mechanism? 0

   b. How many SIUs are not covered by an existing, unexpired permit or other individual control mechanism? **[WEND-BNOCM] [RNC-II]** 0

   If any, explain.

2. How many control mechanisms were not issued within 180 days of the expiration date of the previous control mechanism? **[RNC-II]** N/A

   If any, explain.

D. APPLICATION OF PRETREATMENT STANDARDS AND REQUIREMENTS

1. a. How many SIUs were not evaluated for the need to develop slug discharge control plans in the last 2 years? **[403.8(f)(2)(vi)]** N/A

   b. List the SIUs below.

---

2. Did the CA apply all applicable categorical standards and local limits to IUs whose wastes are hauled to the POTW? N/A

   If yes, identify the industries.

   If no, explain.

---

3. Did any IUs notify the CA of a hazardous waste discharge? **[403.12(j)&(p)]** N/A

   If yes, identify and explain.

E. COMPLIANCE MONITORING

1. Identify the following:

	Program Aspect	Required Frequency	Actual Frequency	Explain Difference
	0	0	0	
a.	Inspection			
	* CIUs	0		
	* Other SIUs	0		

b. Sampling (by CA)

* CIUs 0
* Other SIUs 0

c. Self-Monitoring

* CIUs 0
* Other SIUs 0

d. Reporting

* CIUs 0
* Other SIUs 0

---

2. In the past 12 months, how may, and what percentage of SIUs were the following? **[403.8(f)(2)(v)] [WENDB-NEON] [RNC-II]**

a. Not sampled or not inspected at least once **[WENDB-NEON]** N/A
b. Not sampled at least once N/A
c. Not inspected at least once N/A

If any, explain.

F. ENFORCEMENT

1. Which of the following enforcement actions did the CA use? N/A

a. Notice of letter of violations
b. Administrative Orders
c. Administrative fines
e. Compliance schedules
f. Permit revocation
h. Criminal suits
i. Termination of service
j. Other (specify)

Explain if appropriate.

2. Did the CA comply with it approved ERP? **[403.8(f)(5)] [RNC-II]** N/A

3. Indicate the number and percent of SIUs that were identified as being in SNC* with the following requirements for the most recent full quarter.

SNC Evaluation Period: N/A

Applicable pretreatment standards and reporting requirements :

Self-monitoring requirements

Pretreatment compliance schedules N/A (%)____

* SNC defined by: POTW, EPA

4. Did the CA publish all SIUs in SNC in the largest daily newspaper in accordance with NPDES permit requirements? **[403.8(f)(2)(vii)]** N/A
If yes, attach a copy.
If no, explain.
5. How many SIUs are in SNC with self-monitoring requirements and were not inspected and/or sampled (in the four most recent full quarters)? [WENDB-SNIN] 0
6. a. Did the CA experience any of the following caused by industrial discharges? N/A

	YES	NO	UNK	EXPLAIN
*Interference				
* Pass through				

* Fire or explosions
  (flashpoint, etc.)
* Corrosive structural damage
* Flow obstructions
* Excessive flow rates
* Excess. pollutant concentrations
* Heat problems
* Interference due to O&G
* Toxic Fumes
* Illicit dumping of hauled wastes
* Worker health and safety
* Other (specify)

b. If yes, did the CA take enforcement action against the IUs causing or contributing to the pass through or interference? **[RNC-I)**

F. ENFORCEMENT (Continued)

7. a. How many SIUs are on compliance schedules? **N/A**

   b. List these SIUs by name and compliance schedule end dates (attach additional sheets as needed).

8. Were any CIUs allowed more than 3 years from effective date of a categorical standard to achieve compliance? **[403.6(B)]** **N/A**
   If yes, identify and explain.

9. Did the SIUs return to compliance by any of the following? **[RNC-I]** **N/A**

	YES	NO	NA
a. Within 90 days			
b. Within the time specified in the ERP			
c. Through a compliance schedule			

G. ADDITIONAL EVALUATIONS

INSTRUCTIONS: Attach additional sheets as needed.

SECTION II COMPLETED BY: Gary Reynolds, EPD, CD South **Date:** March 29, 2011
TITLE: E. Specialist III **PHONE:** (912) 264-7284

POTW REPRESENTATIVE: Chris Bray, Operations Manager **Date:** March 29, 2011
PROVIDING RESPONSES: Same **Phone:** (912) 261-7160

INSTRUCTIONS: IDENTIFY PROGRAM COMPONENTS THAT THE CA IS RECOMMENDED (REC.) OR REQUIRED (REQ.) TO IMPLEMENT IN ORDER TO EFFECTIVELY IMPLEMENT THE PRETREATMENT PROGRAM AND/OR TO MEET ITS REGULATORY REQUIREMENTS. SPECIFY THE CORRECTIVE ACTION THE CA NEEDS TO TAKE.				
DESCRIPTION	REGULATORY CITATION	CHECKLIST QUESTION(S)	ACTION	
			REC.	REQ.
A. CA PRETREATMENT PROGRAM MODIFICATION				
1. Notify of program modification	403.18	11.A	N/A	N/A
B. IU CHARACTERIZATION				
1. Identify and locate all SIUs	403.8(f)(2)(i)	11.B	Y	Y
2. Identify the character and volume of pollutants contributed to POTW by IUs	403.8(f)(2)(iii)	11.B.1;11.E.1		Y
Y				
C. CONTROL MECHANISM EVALUATION N/A				
1. Issue individual control mechanisms to all SIUs	403.8(f)(1)(iii)	1.B.1;11.C.1&2		
N/A N/A				
2. Ensure control mechanisms contents include:	403.8(f)(1)(iii)	1.B.2.a-j		Y
Y				
a. A statement of duration b. A statement of nontransferability c. Effluent limits d. Self-monitoring requirements e. A statement of penalties f. Compliance schedules g. Notice of slug loading h. Notification of spills, bypasses, upsets, etc. i. Notification of significant change in discharge j. 24-hour notification of violation/resample requirements				
D. APPLICATION OF PRETREATMENT STANDARDS AND REQUIREMENTS N/A				
1. Apply all applicable pretreatment standards	403.(f)(1)(iii);403.5	1.C.1-6;11.D.2		
2. Evaluate the need for SIUs to develop slug discharge	403.8(f)(2)(v)	1.D.9.;11.D.1		
E. COMPLIANCE MONITORING N/A				
1. Inspect and sample each SIU in accordance with approved program	Approved program	1.D.2.&7;11.E.1		
2. Inspect and sample each SIU once a year (all pollutants in permit)	403.8(f)()(v)	1.D.1.&6;11.E.1&2		
3. Use proper sampling analysis (40 CFR Part 136) and inspection procedures	403.8(f)(2)(vi)	1.D.3.5&8		
4. Require, receive, and analyze reports from SIUs	403.8(f)(2)(iv)	1.B.2.d;1.F.1-12; 11.E.1		
5. Monitor to demonstrate continued compliance and resampling after violation(s)	403.12(g)(1)&(2)	1.F.3.4&9		

E. COMPLIANCE MONITORING (Continued) N/A

6. Ensure CIUs report on all regulated pollutants	403.12(g)(1)	1.F.2&5
7. Ensure noncategorical SIUs self-monitor and report all regulated pollutants at least once every 6 months	403.12(h)	1.F.2&5
8. Require self-monitoring reports form CIUs to be signed and certified and reports from SIUs to be signed	403.12(l); 403.6(a)(2)(ii)	1.F.6
9. Receive notification of hazardous waste discharges	403.12(j)&(p)	1.F.10;11.D.3

F. ENFORCEMENT N/A

1. Implement approved ERP	403.8(f)(5)	1.E.3;11.F.2.
2. Annually publish a list of all IUs in SNC	403.8(f)(2)(vii)	1.E.5;11.F.4
3. Develop IU compliance schedules (formalized)	403.8(f)(1)(iv)(A)	1.B.2.f;11.F.1.7&8
4. Ensure IU compliance within 3 years of standards effective date (or less than 3 years where required by standards)	403.6(b)	11.F.8
5. Ensure new sources report on compliance with appropriate standards within the first 90 days of discharge	403.12(d)	1.F.3.

G. ADDITIONAL EVALUATION

For A through F (CA): N/A indicates the CA is acceptably implementing the pretreatment program. Y (required) indicates the CA must implement the program for the IUs discharging to the CA treatment facilities.

The St. Simons WPCP has no industrial dischargers. Should an industry develop requiring an industrial permit, Ms. Debbie Pace, pretreatment coordinator, has adequate mechanisms in place to issue a proper industrial permit.

SECTION III COMPLETED BY: Gary Reynolds **DATE:** March 29, 2011

TITLE: Environmental Specialist III, Coastal District Office **PHONE:** (912) 264-7284

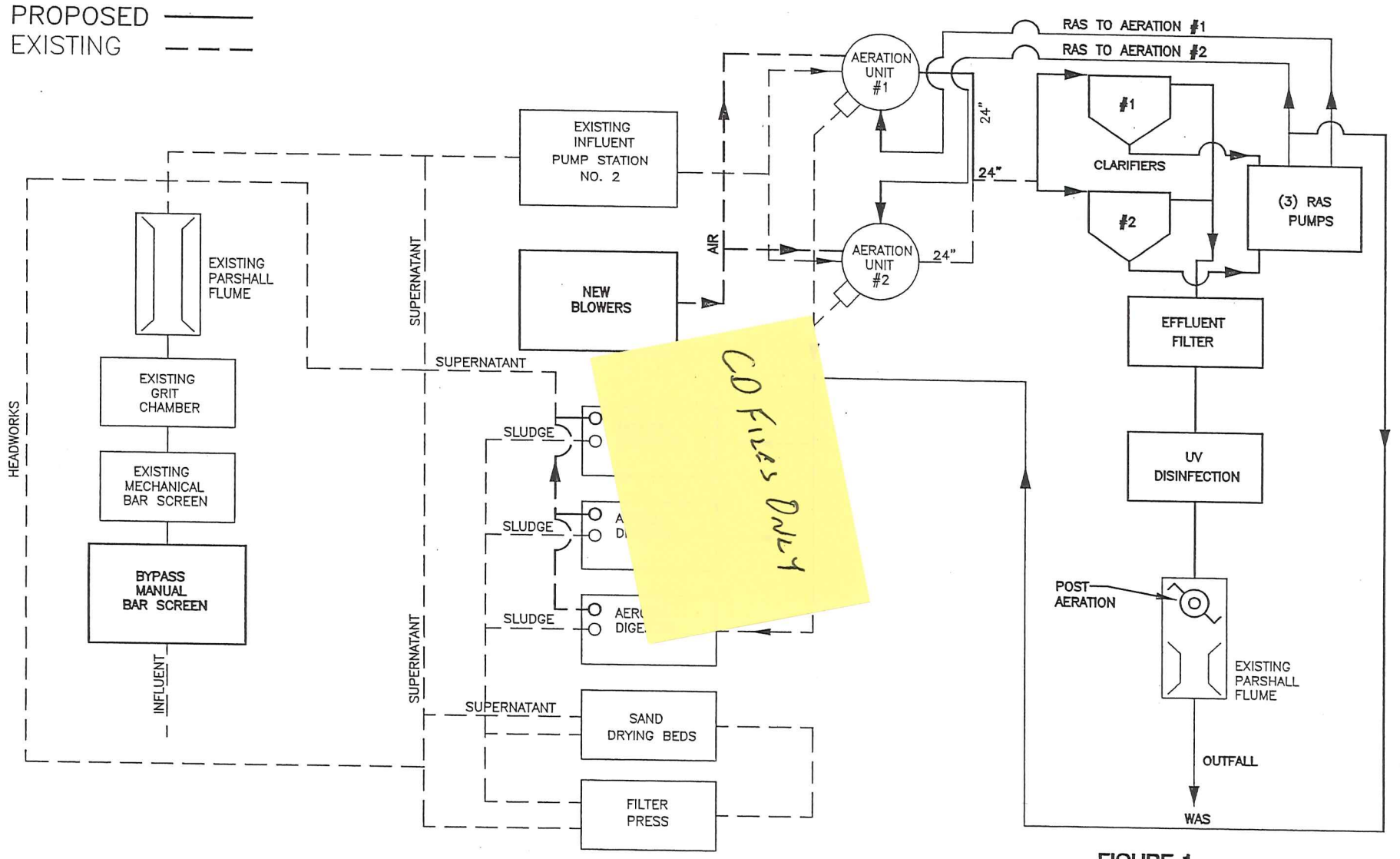
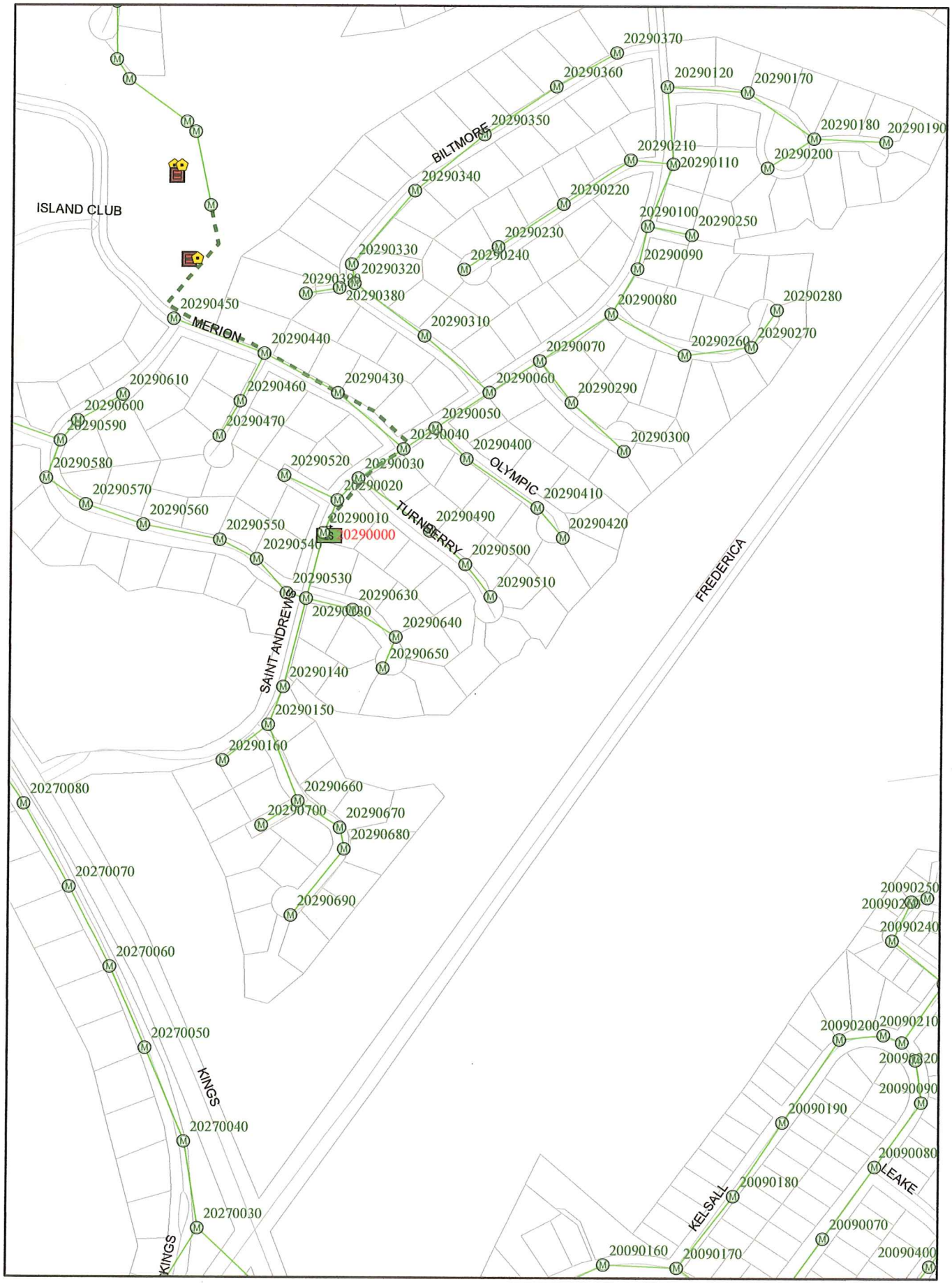


FIGURE 1

ST. SIMONS ISLAND
GLYNN COUNTY WATER POLLUTION CONTROL FACILITIES

PLANT FLOW SCHEMATIC
COMPLETE MIX PROCESS
ACTIVATED SLUDGE

HGBD
A BELL COMPANY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BILTMORE
OLYMPIC
TURNBERRY
SAINT ANDREWS
FREDERICA
KINGS
KELSALL
LEAKE
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JWSC Sanitary Sewer System Customer Complaint Protocol
April 2010 Revision

Preface: The Brunswick-Glynn County Joint W&S Commission considers customer complaints a major indicator of the quality of service being provided by the organization as well as a means of rating overall system condition; therefore a seasoned and professional response is expected. A response to a complaint is a series of actions taken and judgments made by experienced JWSC staff that provides for the timely, effective and efficient investigation and resolution of a customer's concern while also recording the incident for inclusion in the analysis of system problem trends. While each complaint is unique by virtue of the complainant and the issue, general guidelines herein established shall serve as the foundation in accomplishing this organizational objective. This Sanitary Sewer System Protocol or Standard Operating Procedure (SOP) is divided into Administrative and Field actions for clarity purposes only. While there may at times be an Administrative response without a Field Response, the SOP shall always be viewed and conducted as a conceptual whole requiring the cooperative interplay and communication between the customer, supervisory staff, administrative and field personnel.

Regardless of the particular problem or protocol followed to resolve a problem, the complainant or customer shall "always" be left with verbal or written notice to contact us if the problem is not resolved; never leave the customer with the feeling that we do not care or will not assist them further if necessary.

Administrative Protocols

1. Ensure that the reported complaint is properly documented as to the complainant name, service address, telephone number, date and time reported and description of problem. (Normally this information is provided by the JWSC's commercial dispatcher, currently RSVP; however, if the complaint is received through other communication channels all information shown should be acquired from the person receiving the call).
2. When the call is received by and passed-on by the commercial dispatch service (RSVP) or a non-operational staff member, the complainant should be **contacted within 15 minutes of the dispatcher call** by an operational staff member or the "on-call" person to confirm the information provided by dispatcher in order to discuss the problem with the complainant. This call between the operational staff member and complainant shall be the basis of the response by the JWSC. During this phone contact the operational staff member shall ask particular questions regarding the nature of the problem in an attempt to determine whether the problem is a private or public problem and judge the urgency of the response; (where possible, and in the best judgment of an experienced operational staff member, after-hour calls should be avoided when the nature of the complaint or problem is not causing a backflow into the building, an SSO and not completely denying service). ***However; the complainant shall always be given the benefit of any doubt as to whether an immediate field response is necessary.*** At the end of the phone communication with the complainant, the operations staff member shall "always" advise the complainant as to whether and when a field call will be made to resolve the issue and advise the customer if someone needs to be at the service address when the problem is being investigated, arranging a suitable time with the customer as necessary. In many cases, when "after-hour" calls are received and the issue is not an **emergency**, the complainant should be advised that a service call will be scheduled early the next day.

   Note: For the purpose of this Protocol, an **Emergency** shall be defined as an issue or problem causing a backflow of sewage into a building or residence, the overflow of raw sewage on the ground, the complete lack of drainage from a residence or building, a manhole cover off, the report of a cave-in on a road or the report of an alarm at a lift station. **Non-Emergency** calls may include, but not be limited to, such items as odor complaints, poor or slow drainage, local flooding due to rain, rough road cuts and inadequate clean-up after construction work.

3. During normal working hours, the completion of the phone contact between the operations staff member and the complainant, a Customer Request shall be documented in the CMMS documenting all information gathered from the dispatch call and the operations staff person confirming the call with the complainant. With this information and/or documentation in-hand a response by maintenance staff shall be implemented within 30 minutes of the dispatch call to reach the service address within 60 minutes. This Customer Service Request shall be the basis of a Work Order if a field response requiring action more than field investigation is required to resolve the problem.
4. The Customer Request and/or Work Order for complaints handled after working hours shall be documented in the CMMS on the following working day; however, the response time for arrival at the problem site is increased to 120 minutes. A suitable response, based on the urgency of the problem, shall never be delayed due to documentation procedures.
5.
6. Upon resolution of the complaint, the Customer Request and the Work Order (if applicable) shall be reviewed for completeness and appropriateness of response and closed by the responsible Superintendent or his delegated representative. If additional work is necessary to resolve the problem on a "long term" basis, such recommendation shall be documented on the Work Order, held as an "Open" Work Order and scheduled for follow-up as necessary.
7. In order to confirm a field response to a complaint and provide the JWSC feedback on the quality and timeliness of a service call, a standardized **Service Response Card** (door hanger type format) shall be left with the complainant or at a conspicuous location on site at the completion of the initial contact. This card is a pre-paid bulk mail type form and the customer should be encouraged to fill it out and drop it in the mail.

Administrative Notes:

a. Particular questions that should be asked by JWSC Staff during their phone contact with a complainant to better gauge a response may include some of the following:
   i. Are "all" of the toilets and sinks backing-up or are some of them draining properly?
   ii. Is the back-up only happening when the washing machine or dishwasher is being used?
   iii. Is there a clean-out at the house, at the street or in the ally behind the house?
   iv. Has a plumber been contacted? If yes, who and when and what were his findings?
   v. Have you had this problem in the past? If yes, how long ago and what was done to resolve the problem?
   vi. Are you the property owner or a renter?
   vii. Has there been any recent construction or utility work near your location?
   viii. Do you see any sewer manhole or clean-out overflowing around your building or in the street or alleyway? Might the overflowing manhole be a stormdrain?
   ix. Are your neighbors having a problem?
   x. Is the pothole or cave-in a depression or an actual hole in the road?
b. Where a call back to the complainant can not be made due to the lack of a call back number or a "no answer" to a phone call after three consecutive attempts within the 15 minute period, a field response shall be implemented unless the nature of the complaint, as adjudged by an experienced supervisor, is deemed inappropriate.
c. Where no specific location, call back number or contact person is provided by the complainant, (an anonymous call, 911, police, etc.), contact the Superintendent or his delegated representative for a response decision.
d. Where a field response to a complaint occurs and the complainant/resident/owner is not at the service address, a standard door hanger shall be left at the building in a conspicuous location.
e. Where the complaint called is found to be within a **Privately Owned System** as designated in GIS by Red Line Color Coding, or otherwise known, the response to the complaint shall be as follows:
   i. Notify the complainant that our records indicate that the system is a privately owned and operated system and "not" a public system and that we have no authorization to enter upon the premises unless there is a danger to public health;

ii. Ask the complainant if they know who is the owner of the property or responsible for the upkeep of the property and if they have a contact name or telephone number; note such information if it is available and advise the complainant to call them;
iii. Determine from the complainant if there is a danger to the Public Health or the Environment, (see definition of Emergency above);
iv. Immediately contact the Superintendent or his delegated representative to provide all acquired information and request a response decision;
v. Unless otherwise directed by the Superintendent or the JWSC Director, a field response to an issue determined to be an **Emergency** shall be made and properly documented in accordance with this Protocol. Prudent action to protect the Public Health and Environment is paramount in our mission regardless of ownership.

Field Response Protocols

1. **Lower Clean-out available:**
   a. If the complainant is aware of the lower clean-out and is capable of opening it ask that they do so and call back. If the clean-out is dry it is a private problem and the complainant shall be advised to contact a plumber.
   b. If the complainant is unaware of a lower clean-out or incapable of locating or opening it, a field call shall be made.
   c. When a field call is made the first action shall be to check the nearest downstream manhole for surcharging. A free flowing main indicates that the problem is a service line problem.
   d. When a field call is made and the **lower clean-out is found clear or not surcharged**, the complainant shall be advised that the problem is on private property, explaining the situation as best as possible, and that calling a plumber to resolve the issue is recommended. The JWSC may not perform work on private lines. If the complainant is not available a door hanger shall be left at the door or other conspicuous location at the residence or building
   e. When a field call is made and the **lower clean-out is found surcharged,** operational staff shall hydraulically rod the line from the lower clean-out towards the main to break the blockage, or if the service drains to a manhole, from the manhole towards the lower clean-out, whichever is easier.
   f. When a lower clean-out is found surcharged and the blockage relieved to provide service to the property an additional task shall be added to the Work Order to have the service line televised to determine the cause of the blockage. The line televising of the public portion of the service connection shall be accomplished within 3 days of the service call or sooner depending on the potential of reoccurrence as determined by field personnel.
   g. Depending upon the findings and determination of the problem cause, the Superintendent or his delegated representative shall schedule additional tasks as may be necessary to resolve the problem and implemented on the same Work Order.
   h. Where ongoing or scheduled work is required to resolve the problem, the property owner and/or the complainant shall be asked to notify dispatch if the problem re-occurs while additional work is being scheduled and performed.
   i. Where ongoing work is needed to resolve the problem, the customer shall be kept up-to-date on what is being done and when by either personal or phone contact.

2. **No Lower Clean-out available / Upper Clean-out available:**
   a. When a field call is made the first action shall be to check the nearest downstream and upstream manholes for surcharging. A free flowing main indicates that the problem is a service line problem. If this check indicates that the main line is blocked, action shall be taken to clear the main line stoppage and then confirm that the complainant's drainage has been restored.
   b. When a lower clean-out is not available and the upper clean-out is available, and either overflowing or surcharged, (a dry upper clean-out is a plumbing problem), responding

operational staff shall first determine if the service line drains to a manhole. **If the service line discharges to a manhole** the service line shall be hydraulically rodded from the manhole towards the property a distance that clearly enters the private portion of the service line on private property. If the stoppage is not broken at that distance, the complainant shall be advised that the problem appears to be a private problem and that calling a plumber is recommended. If a blockage is broken within that distance operational staff shall schedule line televising to identify the defect and the necessary work to correct the defect and install a lower clean-out.

c. When a lower clean-out is not available and the upper clean-out is available, and is either overflowing or surcharged **with the service line clearly connected to a sewer main**, responding operational staff shall hydraulically rod the service line from the upper clean-out towards the sewer main to gain access to the public portion of the service line. (Since it can not be determined whether the blockage is occurring in the public or private portion of the service line at this time, the upper clean-out is the only access point to the public portion of the service line and can therefore be used to access that portion of the line with the property owner's permission).
d. Upon resolution of the immediate drainage problem that permits further investigation of the entire service line, the service line shall be either televised or sonded from the upper clean-out, (or from the receiving manhole if applicable), to determine if the cause of the blockage is within the public portion of the service line and to mark the location of the service line at the property line. (Since it can not be determined whether the cause of the blockage is occurring in the public or private portion of the service line, the upper clean-out is the only access point to the public portion of the service line and can therefore be used to access that portion of the line with the property owner's permission).
e. If rodding from the upper clean-out does not allow drainage and further investigation, and the problem appears to be on private property by measurement, advise the complainant to contact a plumber and to advise you of the plumber's findings as soon as possible.
f. If rodding from the upper clean-out does not allow drainage and further investigation, and the blockage appears to be on public property by measurement, advise the complainant to minimize water usage and leave the upper clean-out open for immediate discharge and excavate a holding pit around the clean-out until the defect on the public portion of the service can be repaired and/or drainage re-established; such repair shall be considered as a high priority or emergency task and efforts shall be made to keep any overflow from the temporary pit at the upper clean-out from becoming an issue of Public Health.
g. If the cause of the blockage is within the public portion of the service line the Work Order shall be modified to correct the defect and to also install a lower clean-out.
h. If the cause of the blockage is "not" within the public portion of the service line the location of the service line at the private property line shall be marked and a lower clean-out installed at the cost of the JWSC. A report of line televising on private service line incidental to the investigation of the public portion of the service line may be made available to the property owner upon request).
i. Upon installation of the lower clean-out the property owner shall be advised of the clean-outs purpose and shown the location for future reference. Measurements from the downstream manhole along the main sewer and right/left to the property line of the lot being served shall be provided on the completed Work Order for insertion in GIS mapping.

3. **No Lower Clean-out available / No Upper Clean-out available:**
   a. When a field call is made the first action shall be to check the nearest downstream manhole for surcharging. A free flowing main indicates that the problem is a service line problem.
   b. When a lower clean-out is not available and an upper clean-out is not available the responding operational staff shall first determine if the service line drains to a manhole. **If the service line discharges to a manhole** the service line shall be hydraulically rodded from the manhole towards the property a distance that clearly enters the private portion of the service line on private property.

i. If the stoppage **is not** broken within that distance, the complainant shall be advised that the problem appears to be a private problem and that calling a plumber is recommended. The service line from the manhole to the property line shall televised and a lower clean-out installed by the JWSC.

ii. If the blockage **is broken** within that distance operational staff shall schedule line televising to identify the defect and the necessary work to correct the defect and install a lower clean-out.

c. Where neither upper nor lower clean-outs are available, the customer shall be required to install an upper clean-out before the JWSC can assist with the problem. This requirement shall be expressed verbally at the time of the site investigation and followed-up by certified letter within one day of the incident. The property owner and/or complainant shall be advised verbally and by certified letter to contact the JWSC once the clean-out has been installed. A Standard Clean-out Detail Drawing shall be provided with the certified letter.

d. Upon notification by the property owner/complainant that the upper clean-out has been installed, action shall be taken beginning at **Protocol #2c** above.

The delivery of service on complaints is a critical issue for the JWSC. Complaints during normal working hours shall be immediately reported to the Superintendent or his delegated representative for action in accordance with this Protocol. As there is often a great deal of subjectivity and judgment required in the handling of "after-hour" calls, only properly trained and experienced personnel shall serve as "on-call" staff for such duty. "On-Call" staff shall be approved by the Superintendent.

End of Protocol

Brunswick-Glynn County O&M Protocols

Standard JWSC Protocol for Preliminary Sewer Basin Mapping (PSBM)

A PSBM is an above ground physical of a sanitary sewer system starting at the lift station (i.e. LS20030000 being the wet well and moving upstream with the largest pipe or main trunk line to MH20030010, 20030020…..). Work would include opening each manhole, observing inverts, estimating pipe diameters and measuring rim to center manhole down distances with a grade rod in feet and 10ths of feet. Location edits to existing GIS mapping and manhole down information shall be documented on the GIS mapping sheet(s) provided as the lines are traced. No measurements between manholes are needed if manhole locations can be closely approximated from the GIS property line or building information; otherwise distances between plotted manholes should be measured with a tape or wheel. PSBM's should be methodically done basin-by-basin until all basins are completed in consideration of priorities set by management. Field GIS map edits, upon completion will be delivered to the GIS section that will make all geospatial corrections, enter downs, number the manholes and request a final map review and approval from the investigating field crew leader before final publication to the GIS. The investigating field crew leader shall work order noted discrepancies considered significant (requiring prompt attention) or reportable by policy.

***Note**: as this work proceeds there will be a large demand for locating and raising buried manholes, some of which can be found with metal detectors or probe rods, others by rodding using sonde/transmitter equipment and the most difficult with line televising. Also, numerous manhole defects may be observed; however, only those considered significant, like surcharged manholes, missing or broken lids, obstructions to flow in inverts should be addressed; good operational judgment must be used. Dogged persistence is required as all manholes must be located, opened, visually observed and mapped. Delays occurring in one basin, (as while waiting for buried manholes to be raised), should not delay other basins from be started. It is common to have several of these in various stages of completion.*

Standard JWSC Protocol for Potable Water System Mapping (PWSM)

A PWSM is an above ground physical of a water distribution system focusing on water valves and fire hydrants as mapping points, usually beginning with major transmission lines and then branching into smaller distribution networks being fed by the major transmission lines. Water valves and fire hydrants are located as accurately as possible using cadastral and building location information shown on GIS maps or preferably by GPS. All water valves are operated (exercised) counting the number of turns to identify the line size and condition. All hydrants are briefly operated to confirm active operation and condition; (when necessary due to water quality, flushing should be performed). Upon map section completion, map edits and notes depicting line/valve sizes shall be delivered to the GIS section. The GIS section will make all geospatial and/or size corrections, number the valves and request a final map review and approval from the investigating field crew leader before final publication to the GIS. The investigating field crew leader shall work order noted discrepancies considered significant (requiring prompt attention) or reportable.

Standard JWSC Protocol for Sewer System Evaluation Surveys (SSES)

An SSES shall include an evaluation of the gravity sewer system within a defined basin draining to a specific wastewater lift station or WWTP. The SSES shall include comprehensive line cleaning and televising, manhole inspections, smoke testing, dyed water testing and, (where necessary due to system size and/or configuration), flow/rain monitoring to distinguish the most egregious I/I areas within the basin. All SSES tasks enumerated above shall be performed using Standard JWSC Report Forms and procedures as adopted and included in a final bound report.

Standard JWSC Protocol for Wastewater Lift Station Testing (WLST)

An initial WLST is composed of both an inventory and functionality test of a lift station. If a SCADA system is used to track and log facility pumping performance and logs/work orders for any maintenance, repair and replacement for the lift station are maintained, the procedure needs to be performed each five (5) years. If SCADA is not used for the facility, the functionality test portion of the WLST shall be performed annually. JWSC Standard Pump Testing Forms and procedures shall be used to document a WLST and each WLST shall be by work order. A Lift Station Inventory/Operating GIS Information Form shall be completed and delivered to the GIS section for input into GIS attribute tables for the facility.

General Procedures

Task One:

1. Field verify with appropriate measurement devices all pertinent dimensions (i.e. wet well size, depth from rim to bottom, invert(s), top pump motor, discharge pipe exit to valve vault, etc.) shown on Standard Form for type of facility.
2. Confirm placement or install discharge and/or suction gauge fittings for all pumps to be tested and acquire appropriate gauges to be used during testing and removed after testing; (all test gauges to be used shall be indexed in increments of 5 feet of head or less and be routinely checked for calibration on a periodic basis).
3. Check isolation valves for proper operation, check valves for obstructions/proper operation and gauge ports for full flow; (both isolation and check valve must be in proper condition prior to testing).
4. Determine drawdown testing pump range; (wet well level must be below lowest influent line).
5. Determine normal operational pump range and volume between "Pump On" and "Pump Off" levels and set in SCADA for routine monitoring and reporting if available for facility. (Where the pump range must be set above the lowest influent line, causing the gravity system to surcharge, this can not be accomplished).

Task Two:

6. Conduct drawdown tests for each pump using a grade rod to measure from rim to "start pump level" and to "stop pump level" while timing the drawdown with a stop watch (min & sec) and logging TDH and amps at mid-run. (VFD pumps shall be checked at a minimum of three speeds/RPM's on drawdowns with pump shaft RPM being measured during testing). On suction lift facilities where not direct drive driven, pump and motor rpm for each pump shall be measured during testing.
7. Conduct deadhead tests on each pump by closing its discharge valve while the pump is off, starting the pump and logging the discharge/suction head readings and amp draw, and then opening the isolation valve to bring the pump into normal operating TDH range before stopping. (The deadhead test procedure shall be performed in such a manner as to minimize the time that the pump is running at shut-off head; generally less than two minutes).

Task Three:

8. Confirm pump model, impeller, HP and full load amps by either field confirmation or research of reliable records and document on Standard Drawdown Form and in Lift Station Facility File.
9. Acquire appropriate Pump Curve and associated electrical data for tested pumps and add data to Standard Drawdown Form and to Lift Station Facility File.
10. Enter observed measurements and readings into appropriate Lift Station Standard Drawdown Form and review findings of pump rate and deadhead efficiency analysis. (A digital version of the completed Standard Drawdown Form Spreadsheet shall be kept in the JWSC Server and a hardcopy shall be kept in the Lift Station Facility file).
11. Complete a Lift Stations Inventory/Operating Information Form on the lift station and turn in to GIS Section for input into facility attribute fields.
12. Work Order pumps for further investigation and/or repair when the Manufactures Curve Shut-off Head is 15% or greater than the head observed during deadhead test. (On the Standard Drawdown Form, this value will be shown for each pump at an efficiency rating < 85%).

Note: *These General Procedures and the Tasks as enumerated are guidelines and it may not always be possible or practical to follow them precisely in order; however, each piece of information must eventually be provided and each task accomplished to properly complete the Protocol. Significant deviations from the WLST procedures and/or operational problems with the setting of appropriate pump ranges between the lowest influent line and the pump off level or other mechanical or facility discrepancies/issues should be reported. Technical assistance will be available for performing this Protocol where unique situations exist.*

Standard JWSC Protocol for Potable Water High Service Pump Testing (HSPT)

An initial HSPT is composed of both an inventory and functionality test of a ground storage high service pump facility. After the inventory portion of the Protocol is complete and properly logged in GIS, the functionality portion of the test shall be performed annually. JWSC Standard Pump Testing Forms and procedures shall be used to document a HSPT and each HSPT shall be by work order. A Ground Storage Facility Inventory/Operating GIS Information Form shall be completed and delivered to the GIS section for input into GIS attribute tables for the facility.

General Procedures

Task One:

1. Confirm placement or install discharge and/or suction gauge fittings for all pumps to be tested and acquire appropriate gauges to be used during testing and removed after testing; (all test gauges to be used shall be indexed in increments of 1 psi and be routinely checked for calibration on a periodic basis).
2. Check isolation valves and check valves for proper operation and gauge ports for full flow; (both isolation and check valve must be in proper condition prior to testing).
3. Observe and document pump model, impeller, HP, full load amps, RPM, etc. shown on name plates, if available, on the Standard Deadhead Inventory/Testing Form. (Information shall be checked against facility records on file and corrections made as necessary after testing).

Task Two:

4. Conduct a deadhead test on each pump by closing its discharge valve while the pump is off, starting the pump and logging the discharge/suction gauge readings and amp draw, and then opening the isolation valve to bring the pump into normal operating pressure range before stopping. Log all observed information/readings on Standard HSPT Test Form. (The deadhead test procedure shall be performed in such a manner as to minimize the time that the pump is running at shut-off head; generally less than two minutes).

Task Three:

5. Acquire appropriate Pump Curve and associated electrical data for tested pumps and add data to Standard HSPT Test Form and to Facility File.
6. Enter observed measurements and readings into appropriate Standard HSPT Test Form and review findings of pump rate and deadhead efficiency analysis. (A digital version of the completed Standard HSPT Form Spreadsheet shall be kept in the JWSC Server and a hardcopy shall be kept in the Facility File).
7. Complete a Ground Storage Facility Inventory/Operating GIS Information Form on the facility and turn in to GIS Section for input into facility attribute fields.
8. Work Order pumps for further investigation and/or repair when the Manufactures Curve Shut-off pressure is 15% or greater than the pressure observed during deadhead test. (On the Standard HSPT Form, this value will be shown for each pump at an efficiency rating < 85%).

Note: *These General Procedures and the Tasks as enumerated are guidelines and it may not always be possible or practical to follow them precisely in order; however, each piece of information must eventually be provided and each task accomplished to properly complete the Protocol. Significant deviations from the HSPT procedures and/or operational problems or other mechanical or facility discrepancies/issues should be reported. Technical assistance will be available for performing this Protocol where unique situations exist.*

Glynn County SSI, LSSI SI
Septic Tank Inventory

Area	Permitted	Range	Repairs
Brick Kiln Point	8	1968-1998	0
Butler Plantation	10	1996-2001	0
Cannon's Point	7	2001-2004	0
Carts S/D	10	1996-2006	0
Central Park	20	1963-2000	7
Demere Road	38	1964-2000	4
Betsy A. Draughon S/D	5	1994-2001	0
Dunbar Acres	44	1964-2003	11
East Beach	9	1970-1999	1
Eldorado	23	1963-1998	6
Epworth Acres	92	1963-2005	29
Frederica Road	61	1963-2002	33
Frederica Township	4	2004	0
German Villiage	37	1964-2002	3
Glynn Haven	62	1963-1969	3
Golf Retreat S/D	1	1963	0
Hampton Plantation	1	1978	0
Hampton Point	131	1979-2005	9
Harrington S/D	90	19632003	6
Island Retreat	5	1963-1974	0
Jewtown	4	1964-1997	1
Jones Creek Landing	6	1996-2003	1
King City	1	1968	1
King's Terrace	1	1964	0

Glynn County SSI, LSSI SI
Septic Tank Inventory

Area	Permitted	Range	Repairs
Lands End	1	1984	0
Little St. Simons Island	1	1986	2
Oatland Plantation	NA	NA	2
Orange Grove	NA	NA	2
Plantation Point	5	1968-1987	1
Riverside Park	20	1964-2002	9
St. Clair Estates	188	1965-2002	62
St. Simons Heights	54	1963-1994	16
St. Simons Island (General)	89	1963-2004	7
Sea Island	405	1963-2005	136
Settler's Hammock	15	2002-2005	0
Silver Lake	3	1963-2003	1
Sinclair Tract	3	1998-2001	0
Southern Oaks	1	1963	0
Wesley Oaks	1	1963	0
West Point Estates	10	1963-1981	0
West Point Plantation	20	1983-1998	1
Youngwood	20	1963-1996	9

Areas of concern for future water and sewer system

SAINT SIMONS ISLAND 3/29/11

STATION #	LOCATION	STATION NAME	Address
LS # 001	SSI	LORD AVE.	350 Lord Avenue
LS # 002	SSI	ARNOLD RD.	406 Arnold Road
LS # 003	SSI	OGLETHORPE PARK	92 Stewart Ave.
LS # 005	SSI	DEVONWOOD	119 Worthing Rd.
LS # 007	SSI	WYMBERLY	10 Bonaventure Rd.
LS # 008	SSI	BLACK BANKS	10 Black Banks Dr.
LS # 009	SSI	KINGS TERRACE	193 Ashantily Ave.
LS # 011	SSI	SEA PALMS (WINDWARD)	556 Windward Dr.
LS # 012	SSI	SEA PALMS (HARROWGATE)	11 Harrogate Rd.
LS # 013	SSI	ISLAND TOWNHOUSE	1602 East Beach Causeway
LS # 014	SSI	SEA PALMS (SHORE RUSH)	187 Shore Rush Dr.
LS # 015	SSI	SEA PALMS (SHORE RUSH)	114 Shore Rush Dr.
LS # 016	SSI	SEA PALMS (MARSH VILLA)	515 Marsh Villa
LS # 017	SSI	YOUNGWOOD	207 Santa Maria Cir.
LS # 019	SSI	FOREST PARK	241 Forest Park Rd.
LS # 020	SSI	MISSION ASAO	114 Tolomato Trace
LS # 022	SSI	DUNBAR CREEK	225 Dunbarton Dr.
LS # 023	SSI	ISLAND CLUB (KINGS WAY)	Kings Way (Island Club)
LS # 024	SSI	WINN DIXIE	15 Retreat Village Service Rd.
LS # 025	SSI	ST. CLAIRE	10 Dunbar Creek Service Rd.
LS # 026	SSI	SHAW'S BOUNTY	210 Five Pounds Rd.
LS # 027	SSI	KINGS WAY	664 Kings Way
LS # 028	SSI	SEA PALMS (PENINSULA PT.)	100 Peninsula Dr.
LS # 029	SSI	ISLAND CLUB (ST. ANDREW)	225 St. Andrews
LS # 030	SSI	HAMILTON LANDING (GA P)	117 Strangers Cemetary
LS # 031	SSI	SKIFF LANDING	200 Blair Rd.
LS # 032	SSI	SEA PALMS WEST	5615 Frederica Rd. Sea Palms W
LS # 033	SSI	LAWRENCE RD.	2913 Lawrence Road
LS # 034	SSI	HAMPTON POINT	130 Rice Mill
LS # 035	SSI	HAMPTON POINT	11 Rice Mill
LS # 036	SSI	SUGAR MILL	4915 Frederica Rd.
LS # 038	SSI	WEST POINT	106 West Point Dr.

LS # 039	SSI	HARRISON POINT	130 Rosemont St.
LS # 040	SSI	OGLETHORPE SCHOOL	6202 Frederica Rd.
LS # 041	SSI	MUSGROVE	50 Musgrove Pl.
LS # 042	SSI	THE COMMONS	15 Stevens Rd.

SAINT SIMONS ISLAND

STATION #	LOCATION	STATION NAME	Address
LS # 043	SSI	EPWORTH	10 Epworth Service Rd.
LS # 044	SSI	HAMILTON ISLAND	407 Sea Island Cir.
LS # 045	SSI	VILLAGE CREEK	191 South Harrington Rd.
LS # 046	SSI	SOUTH POINT	10 South Point Rd.
LS # 047	SSI	HAWKINS ISLAND	101 Davison Ln.
LS # 048	SSI	HAWKINS ISLAND	399 Hawkins Island Dr.
LS # 049	SSI	HAWKINS ISLAND	107 Hawkins Ln.
LS # 050	SSI	ORANGE HALL	99 Governors Cir.
LS # 051	SSI	HEALTH PAVILLION	216 Island Health Pavillion
LS # 052	SSI	KINGS POINT	112 Point Ln.
LS # 053	SSI	SUNRISE POINT	104 Sunrise Dr.
LS # 054	SSI	SIMONTON	349 North Harrington Rd.
LS # 055	SSI	LAUREL VIEW	122 Laurel View Dr.
LS # 056	SSI	LAWRENCE RD.	1305 Lawrence Road
57			
58			
LS # 059	SSI	SEA ISLAND GOLF MAINT.	16 Hampton Point Sea Island Gol
LS # 060	SSI	STILLWATER	35 Stillwater Dr.
LS # 061	SSI	FREDERICA OAKS	Frederica Oaks
LS # 062	SSI	MARSH'S EDGE	Marshes Edge Drive
LS # 063	SSI	EAST BEACH	East Beach Park

NORTH MAINLAND			
STATION #	**LOCATION**	**STATION NAME**	**Address**
LS # 105	NML	CATE RD. SOUTH	10 Cate Service Rd
LS # 106	NML	SANDALWOOD	10 Sandalwood Service Rd.
LS # 107	NML	CATE RD. NORTH	1430 Cate Rd.
LS # 108	NML	GATEWAY	295 Gateway Center Blvd.
LS # 109	NML	AIR NATIONAL GUARD	1601 Glynco Parkway
LS # 110	NML	HARRY DRIGGERS BLVD	2717 Harry Driggers Blvd
LS # 111	NML	COUNTRY WALK	15 Joining Rd.
LS # 112	NML	SOUTHERN LANDING	110 Brookwater Dr.
LS # 113	NML	MILLENIUM	10 Millenium Rd.
LS # 115	NML	ANIMAL CONTROL	Animal Control
LS # 116	NML	PUBLIC SAFETY COMPLEX	110 Public Safety Blvd.
LS # 117	NML	EAGLE CREST	116 Spring Lake Cir.
LS # 118	NML	PAWS EAST	105 Shell Rd.
LS # 119	NML	PAWS WEST	7175 Golden Isles Parkway
LS # 120	NML	SHELL POINT	154 Fantail Ct.
LS # 122	NML	LEXINGTON PLACE	Lexington Place
LS # 124	NML	TANGLEWOOD	Tanglewood
LS # 125	NML	SADDLEBROOK	Saddlebrook Drive
LS # 126	NML	MCKENZIE RD.	McKenzie Rd.
LS # 127	NML	RIVER RIDGE	River Ridge Hwy 341
LS # 128	NML	SWEETWATER	Sweetwater
LS # 131	NML	GI PKWY EXT # 1	7391 Golden Isles Parkway
LS # 132	NML	HERMITAGE ISLAND	Oak Grove Island Rd.
LS # 133	NML	PECAN PT.	Touchstone Prkwy
LS # 134	NML	GI PKWY EXT # 2	GI PKWY EXT

SOUTH MAINLAND

STATION #	LOCATION	STATION NAME	Address
LS # 101	SML	SOUTHPORT PARKWAY	293 South Port Parkway
LS # 102	SML	FLYING J	163 Flying J
LS # 103	SML	ROYAL OAKS	10 Royal Oaks Service Rd.
LS # 104	SML	ROYAL OAKS	109 Queens Ct.
LS # 114	SML	SOMERSBY	590 Southport Parkway
LS # 121	SML	MAJESTIC OAKS	534 Freedom Trail
LS # 123	SML	CLEARWATER	Clearwater Subd Hwy 17 South
LS # 129	SML	SATILLA SANDS	Satilla Sands Hwy 17 South
LS # 130	SML	I.A.P	75 Joe Frank Harris Blvd.


Link-Belt